.

Indonesia's Halal Export Codification Strategy: Value Evaluation and Policy Implementation

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Abstract

The codification of halal product export data in Indonesia is an essential element in strengthening Indonesia's position as a major player in the global halal industry. However, until now, the implementation of this policy is still not optimal, characterized by data fragmentation between institutions, limited digital infrastructure, and low technical competence of stakeholders. This phenomenon shows that there is a gap between regulation and the reality of implementation in the field. This study uses a descriptive qualitative approach based on secondary data from policy documents, institutional reports, and academic literature. It is analyzed through the theoretical framework of Tawhid String Relationship (TSR) and the principles of Maqasid Sharia. The results of the study confirm that the effectiveness of codification has not been achieved due to the weak integration of information systems and the incomplete application of maqasid values in public policy. The implication is that institutional reform, regulatory harmonization, and an integrated information system that reflects spiritual values and transparency are needed. The novelty of this study lies in a transdisciplinary approach that combines monotheistic ethics and sustainability in public policy evaluation, making the data codification system a more valuable and strategic part of halal economic diplomacy.

Keywords: Data Coding, Halal Export, Public Policy, Maqasid Sharia, Tawhid String Relationship

Introduction

International trade in halal products is experiencing rapid growth as global awareness of the importance of halal and product safety increases. Indonesia, a country with the largest Muslim population, has significant potential to become a major player in the export of halal products. However, to date, the data codification system for the export of halal products has not been fully integrated and is not functioning effectively. Various regulations have been promulgated, including Law No. 33 of 2014 concerning Halal Product Assurance, the Job Creation Law, Government Regulation No. 39 of 2021, and BPJPH decisions; however, technical implementation in the field still encounters various structural and operational obstacles. The phenomenon that emerges is the fragmentation of data between institutions such as BPJPH, the Directorate General of Customs and Excise (DJBC), and the National Single Window Institution (LNSW), resulting in difficulties in real-time data verification and information consistency. Other obstacles include differences in regulatory interpretation, limitations in technological infrastructure, and a lack of human resource training to support the digitization of the codification process.

Most of the previous research focused more on the production and marketing aspects of halal products. In contrast, the issue of codification of export data as part of halal information management has not been studied in depth. This gap is a scientific gap (research gap) that aims to be answered through this research using the *Tawhid String Relationship (TSR)* theory approach and *the principles of Maqasid Sharia*. The TSR theory provides a holistic framework of thought based on monotheism in the management of public policies. At the same time, the principles of Maqasid Syariah emphasize the protection of property (*hifz al-mal*), the guarantee of public trust, and the welfare of the community in economic activities. The urgency of this research lies not only in the importance of evaluating policies that have been running, but also in the need to formulate a model for codifying halal export data that is effective, transparent, and adaptive to information technology developments. Accurate and reliable data is an essential capital in maintaining the credibility of Indonesian halal products in the international market, while strengthening Indonesia's position in the global halal industry supply chain. Based on this background, the formulation of the problem in this study is:

1. How has the policy of codifying halal product export data in Indonesia been implemented so far?

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2. What are the obstacles faced in the implementation of the policy of codifying halal product export data in the field?
3. What are the improvements that can be made to increase the effectiveness of the codification of halal product export data in Indonesia?

Therefore, this study aims to evaluate the effectiveness of Indonesia's policy on codifying halal product export data in encouraging the strengthening of the national halal industry ecosystem and increasing the competitiveness of Indonesian halal products in the global market. This evaluation is carried out with an approach that emphasizes the principles of Maqasid Syariah, which prioritize the protection of the five main aspects of life (religion, soul, intellect, descent, and property), as well as through the framework of Tawhid String Relationship Theory (TSR), which views every policy as integrated into the value of monotheism as the basis of the relationship between humans, nature, and God. Thus, this study aims not only to assess the administrative implementation of data codification policies but also to evaluate the spiritual and socio-economic values contained within them.

The theoretical implications of this research lie in the integration of two main approaches, namely Maqasid Syariah and TSR Theory, into public policy analysis, especially in the context of the halal industry. This approach provides a more complete conceptual basis for how a policy can be examined not only in terms of technocratic effectiveness but also in terms of its value dimensions, sustainability goals, and contribution to the welfare of the people. This contribution enriches the treasure of Islamic-based public policy literature while expanding the use of TSR Theory, which has been more widely applied in the realm of Sharia accounting and management (Siswanto, 2023). The practical implication of the results of this study is to provide strategic guidance for exporters, halal certification bodies, and industry players in understanding the importance of a standardized, transparent, and integrated halal data codification system across institutions. With the availability of a transparent and accountable codification system, efficiency in the halal export supply chain can be improved, thereby reducing technical barriers and opening up wider market opportunities in trading partner countries, especially those that are members of the Organization of Islamic Cooperation (OIC).

Furthermore, from a policy perspective, this research encourages the formulation of data codification policies that are more responsive to the dynamics of the global halal industry. This includes strengthening coordination across ministries and institutions, such as the Ministry of Trade, the Ministry of Religion, the Halal Product Assurance Agency (BPJPH), and the Central Statistics Agency, in building an integrated halal export reporting system. Policies also need to be directed at facilitating access to foreign market information for halal MSMEs and simplifying export procedures through digital platforms. Thus, the data codification policy is not only an administrative tool but also a strategic instrument in Indonesia's halal economic diplomacy.

The novelty of this research lies in its approach, which combines spiritual, social, and economic values within a single analytical framework based on Maqasid Syariah and TSR Theory, to evaluate public policies in the context of halal product exports. In contrast to previous studies that tend to focus on technical analysis of export regulations or halal certification, this study emphasizes the philosophical dimension and Sharia goals as the foundation in designing and evaluating data codification systems. Additionally, this research is a pioneer in aligning the halal export codification system with the principles of good governance and Islamic values, making it relevant for policymakers amid the increasing role of the Sharia economy globally.

Literature Review

This study uses *the Tawhid String Relationship (TSR)* as the grand theory, which is a monotheism-based approach that places all policy and economic activities within the framework of an integrated relationship between humans, nature, and God. In the context of public policy, TSR views that every decision should reflect integrated spiritual and moral values, such as justice, honesty, and trust, which are in line with the maqasid of sharia. This approach provides an ethical and transcendental dimension in public decision-making, including in the management of halal export data. Maqasid sharia itself functions as a normative principle that emphasizes the protection of five main aspects of life, namely religion (din), soul (nafs), intellect (aql), heredity (nasl), and property (mal), which are the foundation in assessing the benefits and sustainability of policies. In the context of codifying halal product export data, the use of the principles of maqasid sharia is very relevant, especially in the aspects of hifz al-mal (protection of property) and hifz al-din (protection of religion). Accurate and transparent data codification creates trust in the halal certification process, maintains product legitimacy in the eyes of consumers, and strengthens Indonesia's position in the global halal supply chain. This approach shows that data codification is not only a technical issue, but also of strategic value in the development of the Islamic economy.

The primary variable in this study is the implementation of halal export data codification policies, which are defined into three operational dimensions: the effectiveness of the data collection system, data integration between institutions, and transparency and accuracy of information. The effectiveness of data collection includes the speed, reliability, and completeness of information collected by institutions such as DJBC, BPJPH,

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and LNSW. Data integration concerns the system's ability to unify information from various institutions so that data can be verified and tracked in real-time. Transparency and accuracy refer to the clarity of data and its reliability in meeting international halal certification standards, which are demanded in global trade. Literature review shows that although various efforts have been made to strengthen the data collection system, such as the introduction of code 952 in the Export Notification of Goods (PEB) module, implementation in the field still faces structural and technical obstacles. Previous studies have generally highlighted aspects of halal production, marketing, and certification, but have not in-depth discussed integrated export information management. Studies from DJBC and BPJPH show that there is still data fragmentation between agencies and differences in operational standards, which cause data verification to be slow and inconsistent.

In a theoretical framework, the integration of information systems and digital governance (e-Government) provides an essential foundation. Both approaches emphasize the need for standardized and interconnected systems to avoid duplication of data, increase efficiency, and strengthen public accountability. Technologies such as blockchain and cloud computing are also considered technical solutions to overcome the weaknesses of current data collection systems. Global studies from Malaysia and the Middle East show that the use of integrated information systems can significantly improve the speed, transparency, and accuracy of halal data, thereby strengthening the bargaining position in international trade. The conceptual model built in this study combines information system approaches, digital governance, and the principles of maqasid sharia and TSR. This framework is designed to explain the flow of halal export data collection from data collection by exporters to cross-agency information exchange. This model also accommodates obstacles such as information technology limitations, differences in regulatory interpretations, and institutional resistance to the adoption of digital innovations. Thus, the conceptual framework prepared not only maps the relationship between variables, but also provides a direction for improvement for strengthening an adaptive and sustainable national data collection system. Furthermore, the conceptual illusion of this research is as follows:
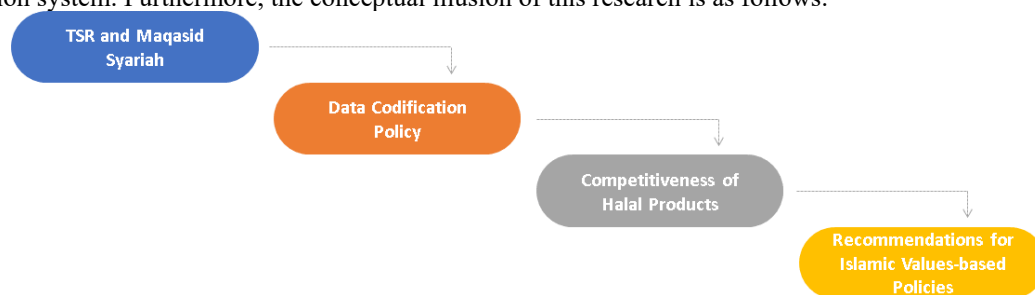

Figure 1. Conceptual Framework of the Researcher

Referring to Figure 1 above, it illustrates the relationship between fundamental theories (TSR and Maqasid Syariah), data codification policies, and outputs, which aim to enhance the competitiveness of halal products and provide policy recommendations grounded in Islamic values.

Methods

This research employs a descriptive qualitative approach, as it is considered the most relevant for addressing problem formulations that focus on policy evaluation and the identification of obstacles to implementing exporting data for halal products. The purpose of this approach is to explore in depth the phenomena that occur in the field and interpret contextually how the policies that have been set are implemented by stakeholders, including business actors, government agencies, and halal certification bodies. The qualitative approach also provides space for researchers to examine the complexity of the relationship between policy variables, regulations, and implementation realities within a holistic framework of thinking based on the values of maqasid sharia and *the theory of Tawhid String Relationship* (TSR).

The data used in this study are secondary and were obtained through literature studies on formal policies, performance reports of related institutions, and scientific articles from national and international journals. The primary data sources include policy documents from the Halal Product Assurance Agency (BPJPH), the Directorate General of Customs and Excise (DJBC), as well as reports from the National Committee for Sharia Economics and Finance (KNEKS). Additionally, the researcher also utilizes the results of relevant previous academic studies, including halal policy studies from other countries such as Malaysia and the United Arab Emirates, which have implemented a halal export digitalization system based on a cloud system and blockchain, serving as a benchmark to identify policy gaps in Indonesia.

The data collection mechanism is carried out through *documentary analysis* techniques by selecting official documents and scientific publications based on the criteria of relevance and substance. All documents are analyzed using the content analysis method, identifying key themes that emerge, such as the effectiveness of the data collection system, inter-institutional integration, information transparency, and technological barriers.

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The data processing process involves digitizing text, grouping themes, and coding processes to identify repeated patterns of policies and implementations. The analysis is carried out inductively and exploratively to capture the complexity of the problem and formulate findings rooted in field data and relevant theories.

To maintain the validity of the data, this study employs the source triangulation technique, which involves comparing data from official documents, policy reports, and the results of previous studies to obtain more comprehensive conclusions and minimize bias. Thus, the analysis process not only describes the status quo of policy implementation but also provides recommendations based on the values of sharia maqasid and the principle of monotheism as interpreted in the framework of TSR. This approach enables the research to not only reveal the technocratic weaknesses of the data codification system but also to offer ethical and spiritual insights into the management of halal export policies in the future.

Results and Discussions

Implementation of the Policy of Codification of Halal Product Export Data in Indonesia So Far

The implementation of the policy of codifying halal product export data in Indonesia reflects the great challenge in unifying regulations, information systems, and spiritual values that underlie the sharia economy. Although Indonesia already has a strong legal framework through Law No. 33 of 2014 concerning Halal Product Assurance and Government Regulation No. 39 of 2021, implementation in the field has not been fully effective. Data fragmentation between institutions such as the Halal Product Assurance Agency (BPJPH), the Directorate General of Customs and Excise (DJBC), and the National Single Window Institute (LNSW) causes real-time verification to be suboptimal. This disintegration is exacerbated by differences in regulatory interpretations and technological limitations, including the lack of human resource training that supports the digitalization of processes. In answering this question, the approach used in this study refers to two grand theories that complement each other: Maqasid Syariah and Tawhid String Relationship (TSR). The principles of Maqasid Syariah provide a normative basis in evaluating policies, especially the protection of property (hifz al-mal) and religion (hifz al-din), which, in the context of halal export, means ensuring the validity of product data and preventing consumer doubts about the halal status of products. Meanwhile, the TSR theory places the policy process within the framework of the value of monotheism, that all public policies should be a reflection of the harmonious relationship between humans, nature, and God.

The phenomenon underlying this research is the gap between the potential of digital technology and its practical implementation in the field. While digital platforms and blockchain systems have great potential in creating transparency and accuracy in halal data, the reality is that limited infrastructure and low coordination across agencies pose significant obstacles. Poorly codified data poses risks not only in terms of logistics and verification, but also to the reputation of the national halal industry in the eyes of the world. Previous studies have focused more on the production and marketing of halal products, with few examining aspects of information management and the codification of export data in a structured manner. For example, research as part of the "Halal Research Body of Knowledge" (HaRBoK) underscores the importance of cross-disciplinary integration in the halal industry, ranging from regulatory aspects to information systems and management. However, the practical application of this concept to the export data collection system in Indonesia remains sporadic and incomplete.

This research is innovative because it brings together the normative framework of Maqasid Syariah and TSR to evaluate public policy as a whole. This approach emphasizes that policy is not just an administrative tool, but a manifestation of the values of justice, honesty, and accountability. In the context of data codification, this means that the system built must be able to guarantee public trust, provide economic benefits, and be part of global halal diplomacy. Therefore, the implementation of the codification policy must pay attention to technocratic and spiritual aspects, so that the policy is not only effective operationally, but also a blessing and has an impact on the welfare of the people. In addition to strengthening theories and norms, this research also encourages the formulation of strategic policies based on Islamic good governance. This includes cross-ministerial synergy, digital platform optimization, and the preparation of performance indicators that are not only output-based but also outcomes for export competitiveness. When the codification system is nationally standardized and internationally connected, Indonesia is not only able to improve the efficiency of the supply chain but also establish itself as the center of the world's halal industry. Thus, data codification is not just a recording process, but a foundation for Indonesia's legitimacy, sustainability, and bargaining power in a global economy based on sharia values.

Obstacles Faced in the Implementation of the Halal Product Export Data Codification Policy in the Field

The implementation of a policy to codify halal product export data in Indonesia reflects a significant challenge in the process of reforming the national information system, which is expected to support global market confidence in Indonesian halal products. Although Indonesia has great potential as a major player in the global halal industry, in reality, the implementation of this policy still encounters significant structural and technical obstacles. This phenomenon indicates a disconnection between regulatory norms and operational

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realities in the field. One of the most fundamental obstacles is the fragmentation of data between institutions. Each institution, such as the BPJPH (Halal Product Assurance Agency), the Directorate General of Customs and Excise (DJBC), and the National Single Window Institution (LNSW), has a data system that has not been optimally integrated. Different data formats and a lack of system interoperability create duplicate data, slow down verification, and lower the efficiency of the export process. This situation shows a failure in applying the theory of information system integration, which should be the primary foundation in export data management.

In addition, the limitations of digital infrastructure pose a significant obstacle to the implementation of the codification system. Remote areas in Indonesia still face inadequate internet and information technology systems. This bottleneck causes the data integration process to take place manually or be delayed, making it difficult to track and verify in real-time. From the perspective of e-Government Governance theory, this condition indicates the low readiness of public institutions to support the accountability and efficiency of data-based services. On the other hand, the human resource factor is also a significant challenge. The lack of training and technical understanding among business actors and state apparatus in using the digital codification system leads to low-quality data input, as the validity and accuracy of the data are highly dependent on the competence of human resources in operating the system. This aspect is often overlooked in policy design, which focuses more on the legal and technical aspects of the system, without taking into account operational readiness at the executive level.

In the conceptual framework, this study uses the grand theory approach of Tawhid String Relationship (TSR) and the principles of Maqasid Sharia. The TSR theory views that every activity, including public policy, must reflect the values of monotheism in the relationship between humans, nature, and God. In this context, data codification is not solely seen as a technocratic task, but as part of a moral and spiritual effort to maintain trust in halal economic transactions. When the data collection system is weak, not only is the credibility of the product disturbed, but also the mandate of the people is at stake. Maqasid Sharia, on the other hand, provides a normative framework that public policy should lead to the protection of the five main aspects of life: religion, soul, intellect, heredity, and property. In the context of codifying halal export data, the two most relevant aspects are hifz al-din (religious protection) and hifz al-mal (property protection). Inaccurate or invalid data has the potential to produce products that are not halal to be exported, thereby harming religious values and the country's economy. When the certification and tracking process of halal products does not run transparently, the trust of the international community will also be degraded.

Another phenomenon is the absence of a periodic monitoring and evaluation mechanism that measures the effectiveness of the codification system implemented. Inter-agency performance evaluations are often inconsistent, and success indicators are more focused on export quantity rather than data system quality. The absence of a strong accountability system strengthens the suspicion that the implementation approach is still symbolic and normative, rather than outcome-based, which has a direct impact on Indonesia's halal export performance. In academic reviews, there are still limited studies that in-depth evaluate the relationship between the data codification system and the export effectiveness of halal products, highlighting a significant scientific gap. The majority of previous research has focused only on halal certification or halal product branding strategies, while aspects of data management and system integration have rarely been comprehensively addressed. This research aims to fill this void with a transdisciplinary approach that combines Islamic economics, public policy, and information technology, bound by the principle of monotheism as an ethical and philosophical foundation.

The implications of the study's results indicate that strengthening the halal export data codification system requires three simultaneous approaches. First, reforming the information technology system across institutions involves adjusting data formats and enhancing system interoperability. Second, improving human resource competencies through regular training and certification of the digital halal system implementation is crucial. Third, adopting a value-based approach entails internalizing the principles of Maqasid Syariah and TSR Theory in strategic decision-making at the ministry and related institutional levels. Only with such an integrated approach can the codification system become a reliable tool, not just an administrative instrument. Therefore, the obstacles faced in implementing the policy of codifying halal product export data are not only technical but also structural and value-based. The solutions offered must be holistic, encompassing the strategic, spiritual, and operational dimensions simultaneously. This research makes an essential contribution to the development of public policies based on Islamic values that are not only effective administratively but also uphold ethical values in the economic management of the ummah.

Improvement Efforts That Can Be Done to Increase the Effectiveness of the Codification of Halal Product Export Data in Indonesia

The discussion on improvement efforts in improving the effectiveness of codification of halal product export data in Indonesia cannot be separated from the complexity of the reality in the field, regulatory developments, and global market demands that increasingly prioritize aspects of transparency and

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accountability. The phenomenon that has occurred so far shows that although Indonesia has great potential as a producer of halal products, the weak export data collection system makes information about the volume, value, and types of halal products exported not well mapped. This leads to low trust among trading partners and a lack of optimal role of data in strategic policy-making, both at the national and international levels. Improvement efforts must start from the realization that the export data codification system is not solely an administrative matter, but part of a grand strategy of Indonesia's halal economic diplomacy. As described in this research document, the approach used is the integration between *the theory of Tawhid String Relationship* (TSR) and *the principles of Maqasid Sharia*. TSR places the entire policy process in a holistic relationship between humans, nature, and God, which means that the data codification system must be built based on honesty, transparency, and fairness, in line with the values of monotheism. On the other hand, *Maqasid Syariah* underlines the importance of the protection of property (hifz al-mal), which makes the validity and accuracy of data a vital aspect in maintaining the sustainability of the Sharia economy.

The main recommendation in this improvement effort is to build an integrated and real-time national halal information system. In studies from Malaysia and the Middle East, cross-agency data integration has been shown to improve efficiency, speed up export processes, and improve the accuracy of halal data needed by global trading partners. To adopt these best practices, Indonesia needs to connect data from various institutions such as DJBC, BPJPH, LNSW, and the Ministry of Trade into a single digital platform that is user-friendly and accessible to halal exporters. This can encourage self-declaration that is automatically validated by the system through artificial intelligence (AI) or blockchain. In addition to digital infrastructure, regulatory improvements are also essential. Currently, there is still an overlap of authority and differences in interpretation of regulations between institutions, which hinder the effectiveness of the system. Therefore, it is necessary to harmonize regulations through the establishment of a forum across ministries and institutions that have the authority to prepare technical guidelines for codifying halal export data that are binding. This will avoid policy fragmentation and accelerate the implementation of the system nationally.

In terms of human resources, training and capacity building for the state apparatus and halal industry players are top priorities. Many halal MSME actors do not understand the urgency of reporting halal exports digitally. Therefore, it is necessary to develop digital literacy programs and training on the use of data codification systems, especially for industry players in the regions. This program should be developed through partnerships between the government, universities, and halal industry associations to be more targeted. This research also highlights the importance of making data codification systems a strategic instrument, not only for reporting, but also to increase competitiveness. Accurate and reliable halal export data will improve the bargaining position of Indonesian products in the global market and become a tool for halal economic diplomacy, strengthening Indonesia's role in the Organization of Islamic Cooperation (OIC) and other international halal forums.

At the operational level, one of the tangible forms of improvement that can be implemented immediately is to compile a national halal export dashboard accessible to the public, presenting the latest data on destination countries, volumes, types of products, and halal exporting companies. This dashboard must be directly connected to the system used by Customs and BPJPH, ensuring that the displayed data is the result of automatic synchronization. This transparency will encourage accountability while making it easier for global investors to identify potential partners in Indonesia. Additionally, fiscal policies such as tax incentives or export subsidies for companies that meet the requirements for digital halal data reporting should also be considered. This policy will not only encourage compliance but also create a double effect in increasing export volumes as well as the quality of national halal data governance.

The theoretical contribution of this proposed improvement is the strengthening of *the TSR-Maqasid Sharia-based* approach in public policy design. Not only does the halal export data codification system need to pursue technical efficiency and effectiveness, but it also requires internalizing spiritual values that emphasize human connection with God and the social welfare of the people. This approach makes the data codification policy not only an administrative tool, but also a medium of da'wah and a real contribution to the development of an Islamic civilization based on a just economy. Thus, the improvement efforts proposed in this study encompass all aspects, ranging from institutional structures and regulations to information technology, human resource capacity building, and philosophical approaches based on Islamic values. These steps are believed to address the challenge of codifying halal product export data in Indonesia, improve export performance, and strengthen Indonesia's position in the global halal industry ecosystem. This effort not only contributes to better policy practices but also strengthens the scientific foundation in the development of public policy models based on maqasid and monotheism.

Conclusion

Based on the study's findings, it can be concluded that the implementation of the policy to codify halal product export data in Indonesia still faces various structural, technical, and normative challenges. Although a relatively comprehensive regulatory framework exists, implementation in the field reveals data fragmentation

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among institutions, limited digital infrastructure, and low technical literacy among stakeholders. This has an impact on the low effectiveness of the data collection system, as well as the weak accuracy and transparency of Indonesian halal product export information. Within the framework of the theory of Tawhid String Relationship (TSR) and the principles of Maqasid Sharia, this condition indicates that the data codification system does not fully reflect the values of monotheism, justice, and protection of the people's property.

The limitation of this research lies in its approach, which still relies on secondary data, and therefore has not explored in depth the perspectives of industry players and policy implementing authorities in the regions. Additionally, the lack of technical simulation of an integrated information system is also an obstacle to practically testing the effectiveness of the proposed concept. As a theoretical implication, this study strengthens the significance of the transdisciplinary approach between public policy, information systems, and Sharia economics with the philosophical foundation of TSR and Maqasid Syariah. This approach demonstrates that public policy can be analyzed and designed holistically by paying attention to the spiritual, ethical, and technocratic dimensions simultaneously. The practical implications include the need to accelerate the integration of halal export information systems, strengthen the human resource capacity of industry players, and adjust regulations to be more harmonious among institutions. Meanwhile, in terms of policy, a national roadmap is needed to build a standardized, transparent, and adaptive data codification system for digital technology.

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